Amdt. Dated February 1, 2005

Reply to Office Action of January 21, 2005

Listing of Claims:

WE CLAIM:

- 1. (Original) A friction material comprising a base material impregnated with at least one curable resin, the base material comprising i) a porous primary layer comprising a fibrous base material, and ii) a secondary layer comprising geometrically symmetrically shaped friction modifying particles at least partially covering an outer surface of the material; the material primary layer holding the geometrically symmetrically shaped friction modifying particles on the surface of the primary material layer.
- 2. (Original) The friction material of claim 1, wherein the primary layer material comprises fabric materials, woven and/or nonwoven materials.
- 3. (Original) The friction material of claim 2, wherein the primary layer material has a surface smoothness in the range of 0.02 mm Ra to about 0.2 mm which smooth surface provides the friction material with consistent anti-shudder and coefficient of friction characteristics.
- 4. (Original) The friction material of claim 1, wherein the friction modifying particles comprise symmetrically shaped silica particles.
- 5. (Original) The friction material of claim 1, wherein the friction modifying particles comprise symmetrically shaped celite particles.
- 6. (Original) The friction material of claim 1, wherein the friction modifying particles comprise a mixture of carbon particles and symmetrically shaped silica

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particles, the friction modifying particles being present at about 0.2 to about 80%, by weight, based on the weight of the primary layer material.

- 7. (Original) The friction material of claim 1, wherein the friction modifying particles cover about 3% to about 90% of the surface area of the primary layer material.
- 8. (Original) The friction material of claim 1, wherein the friction modifying particles substantially cover the surface area of the primary layer material.
- 9. (Original) The friction material of claim 1, wherein the friction modifying particles comprise a mixture of symmetrically shaped diatomaceous earth particles and fully carbonized carbon particles or partially carbonized particles, and mixtures thereof.
- 10. (Original) The friction material of claim 1, wherein the friction modifying particles comprises about 0.2% to about 50%, by weight, of friction modifying particles, based on the weight of the primary layer material.
- 11. (Original) The friction material of claim 6, wherein the friction modifying particles comprises about 20% to about 35%, by weight, of symmetrically shaped silica particles, and about 65% to about 80% carbon particles, based on the total weight of the friction modifying particles.
- 12. (Original) The friction material of claim 1, wherein the friction modifying particle size ranges from about 0.5 to about 20 microns.

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- 13. (Original) The friction material of claim 1, wherein the friction modifying particles comprises symmetrically shaped diatomaceous earth.
- 14. (Original) The friction material of claim 1, impregnated with a phenolic resin or a modified phenolic resin.
- 15. (Original) The friction material of claim 14, wherein the friction material comprises about 40 to about 120% resin, by weight.
- 16. (Original) The friction material of claim 1, impregnated with a mixture of a phenolic resin and a silicone resin wherein the amount of silicone resin in the mixture ranges from approximately 5 to approximately 80%, by weight, based on the weight of the mixture, and optionally, wherein the phenolic resin is present in a solvent material and the silicone resin is present in a solvent material which is compatible with the solvent material of the phenolic resin.
- 17. (Original) The friction material of claim 14, wherein the modified phenolic resin comprises an epoxy phenolic resin.
 - 18. (Withdrawn) A process fro producing a friction material comprising: forming a primary layer material,

coating about 3% to about 100% of at least one surface of the primary layer material with at least symmetrically shaped friction modifying particles, the symmetrically shaped friction modifying particles being present at about 0.2 to about 62%, by weight, based on the weight of the primary layer material, and

impregnating the coated material with a phenolic resin, or phenolic-based resin mixture, and thereafter curing the impregnated material at a predetermined temperature for predetermined period of time.

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- 19. (Withdrawn) The process of claim 18, wherein the friction modifying particles comprise a mixture of carbon particles and symmetrically shaped silica particles.
 - 20. (Withdrawn) A process for producing a friction material comprising: pre-saturating a primary layer material with a resin, drying and curing the resin; and subsequently coating the saturated and cured primary layer material with a mixture of pehnolic resin and symmetrically shaped particles.
- 21. (Withdrawn) The process of claim 20, wherein the friction modifying particles comprise a mixture of carbon particles and symmetrically shaped silica particles.
- 22. (Withdrawn) A process for producing a friction material comprising: substantially fully coating at least one surface of a primary layer material with a secondary layer of geometrically symmetrically shaped friction modifying particles, impregnating with at least one type of resin, and

curing at a predetermined temperature for a predetermined period of time to form the friction material.

- 23. (Withdrawn) The process of claim 22, wherein the friction modifying particles comprise a mixture of carbon particles and symmetrically shaped silica particles.
 - 24. (Withdrawn) A process for producing a friction material comprising:

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at least partially coating at least one surface of a primary layer with a secondary layer comprising of a mixture of geometrically symmetrically shaped friction modifying and irregularly shaped friction modifying particles,

Impregnating with at least one type of resin, and

curing at a predetermined temperature for a predetermined period of time to form the friction material.

- 25. (Withdrawn) The process of claim 24, wherein the friction modifying particles comprise a mixture of carbon particles and symmetrically shaped silica particles.
- 26. (Withdrawn) A process for producing a friction material comprising:

substantially fully coating at least one surface of primary layer with a secondary layer of a mixture of the geometrically symmetrically shaped friction modifying and irregularly shaped friction modifying particles,

Impregnating with at least one type of resin, and

curing at a predetermined temperature for a predetermined period of time to form the friction material.

27. (Withdrawn) The process of claim 26, wherein the friction modifying particles comprise a mixture of carbon particles and symmetrically shaped silica particles.